

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Hydrochloric Acid 31% Technical Grade  
**Synonyms:** Muriatic Acid, Spirits of Salt, Hydrogen Chloride, Hydrochloric Acid  
**CAS Number:** 7647-01-0  
**Grade/Purity:** Technical Grade  
**Product Type:** Acids  
**Product Use:** Industrial, Manufacturing or Laboratory use  
**Manufacturer/Supplier:** Alliance Chemical, 204 South Edmond St, Taylor, Texas 76574  
**Information:** 512-365-6838 | [www.alliancechemical.com](http://www.alliancechemical.com)  
**Emergency:** CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

### 2. HAZARDS IDENTIFICATION

**Signal Word:** Danger

**GHS Pictograms:**



**Hazard Statements:**

H314	Causes severe skin burns and eye damage [Danger Skin corrosion/irritation]
H331	Toxic if inhaled [Danger Acute toxicity, inhalation]

**Precautionary Statements:**

P260,	P261, P264, P271, P280, P301+P330+P331, P302+P361+P354, P304+P340, P305+P354+P338, P316, P321, P363, P403+P233, P405, and P501
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### 3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	WEIGHT %	CAS #	EINECS# / ELINCS#	FORMULA	MOLECULAR WEIGHT
Hydrochloric Acid	31%	7647-01-0	231-595-7	ClH	36.46 g/mol
Water	69%	7732-18-5	231-791-2	H <sub>2</sub> O	18.02 g/mol

### 4. FIRST-AID MEASURES

<b>Eyes</b>	EYES: immediately flush with plenty of water for at least 15 min. and get medical attention; continue flushing for another 15 min. if physician does not arrive promptly.
<b>Skin</b>	SKIN: immediately flush skin while removing contaminated clothing; get medical attention promptly; use soap and wash area for at least 15 min. (USCG, 1999)
<b>Inhalation</b>	INHALATION: remove person to fresh air; keep him warm and quiet and get medical attention immediately; start artificial respiration if breathing stops.
<b>Ingestion</b>	INGESTION: have person drink water or milk; do NOT induce vomiting.

## 5. FIRE-FIGHTING MEASURES

<b>Suitable Media</b>	Dry chemical, CO <sub>2</sub> , water spray. Use water spray to cool containers.
<b>Unsuitable Media</b>	Do not use a solid water stream as it may scatter and spread fire.
<b>Protective Equipment</b>	Wear self-contained breathing apparatus and full protective clothing.
<b>Combustion Products</b>	May include carbon oxides and other toxic fumes. See Section 10.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Use PPE as described in Section 8. Ensure adequate ventilation. Evacuate personnel to safe areas.
<b>Environmental</b>	Prevent leakage or spillage from entering drains, sewers, or waterways.
<b>Containment &amp; Cleanup</b>	Absorb with inert material. Collect in appropriate waste container. Dispose per applicable regulations.

## 7. HANDLING AND STORAGE

<b>Safe Handling</b>	Use with adequate ventilation. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Keep container closed when not in use.
<b>Safe Storage</b>	Store in a cool, dry, well-ventilated area. Use corrosion-resistant containers. Keep away from incompatible materials (see Section 10). Keep containers tightly closed.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Use adequate ventilation. Provide eyewash stations and quick-drench showers accessible to areas of use.

**Occupational Exposure Limits:**

No established occupational exposure limits.

<b>Eyes</b>	Wear chemical safety goggles or face shield.
<b>Skin</b>	Wear chemical-resistant gloves and protective clothing.
<b>Inhalation</b>	Use NIOSH-approved respirator if exposure limits are exceeded or irritation occurs.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Clear, colorless corrosive liquid
<b>Odor</b>	Characteristic
<b>pH</b>	Not Available
<b>Melting Point</b>	-74°C (-101.2°F)
<b>Boiling Point</b>	108°C (226.4°F)
<b>Flash Point</b>	Not applicable
<b>Vapor Pressure</b>	Not Available
<b>Specific Gravity</b>	1.15
<b>Solubility</b>	Highly water soluble, polar solvent compatible
<b>Molecular Formula</b>	ClH
<b>Molecular Weight</b>	36.46 g/mol

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable under recommended storage conditions.
<b>Hazardous Reactions</b>	None under normal processing conditions.
<b>Conditions to Avoid</b>	Heat, sparks, open flame, and incompatible materials.
<b>Incompatible Materials</b>	Strong acids, strong bases, reactive metals, water (for some concentrated forms).
<b>Decomposition Products</b>	May produce carbon oxides and other toxic fumes when heated to decomposition.

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity:** See Section 2 for GHS hazard classification.

<b>IARC</b>	Not listed as carcinogen.
<b>NTP</b>	Not listed as carcinogen.
<b>OSHA</b>	Not listed as carcinogen.

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	Data not available. Avoid release to the environment.
<b>Persistence</b>	Not Available
<b>Bioaccumulation</b>	Not Available
<b>Mobility in Soil</b>	Not Available

## 13. DISPOSAL CONSIDERATIONS

Dispose of contents/container in accordance with applicable federal, state, and local regulations. Do not dispose of into drains or waterways.

## 14. TRANSPORT INFORMATION

<b>US DOT</b>	UN1789, Hydrochloric acid, 8, PG II
<b>IMDG</b>	UN1789, Hydrochloric acid, 8, PG II
<b>IATA/ICAO</b>	UN1789, Hydrochloric acid, 8, PG II
<b>Marine Pollutant</b>	No

## 15. REGULATORY INFORMATION

<b>TSCA Inventory</b>	All ingredients are listed on the TSCA Active inventory.
<b>California Prop 65</b>	Refer to California Proposition 65 list for current status.
<b>SARA 311/312</b>	See Section 2 for hazard classifications.
<b>SARA 313</b>	Refer to EPA Toxic Release Inventory for current listing status.

## 16. OTHER INFORMATION

**Revision Date:** 04/27/2026

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